DOCUMENT RESUME

ED 329 420 RC 018 039

AUTHOR Cautley, Eleanor K.
TITLE Rural-Urban Differences in Employment, Household Composition, and Poverty Status among Single Mothers.
SPONS AGENCY Economic Research Service (DOA), Washington, D.C.
PUB DATE 89
NOTE 95p.; M.S. Thesis, University of Wisconsin-Madison.
PUB TYPE Dissertations/Theses - Masters Theses (042)

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS Census Figures; Dependents; *Employment Level; Family Characteristics; Family Income; *Family Structure; Fatherless Family; Heads of Households; *Mothers; *One Parent Family; *Poverty; Rural Family; *Rural Urban Differences

ABSTRACT

Using 1980 Census data, this study examined household composition and labor force participation for single mother households in urban and rural areas. The study used Census data on a representative random sample of 5,712 female headed family households. Variables studied were rural-urban status, household composition, labor force participation, and poverty status. The study controlled for race, education, marital status, and age. A descriptive analysis of the data used crosstabulation, group means, and proportions in poverty, while multivariate analysis methods were multiple classification analysis and least squares multiple regression analysis. Significant findings were: (1) single mother households in small town and rural areas experience poverty levels as high or higher than those in central city and suburban areas; (2) extra adults living in the household and earnings from employment of these extra adults are both associated with decreased family poverty levels; and (3) employment of the single mother is the most important variable associated with decreased family poverty. Policy recommendations include wage equity policies across geographic areas, increased levels of support from absent fathers, and assistance with costs of day care and health care for single parents. This paper contains 9 data tables and 54 references. (KS)

RURAL-URBAN DIFFERENCES IN EMPLOYMENT, HOUSEHOLD COMPOSITION, AND POVERTY STATUS AMONG SINGLE MOTHERS

by

ELEANOR K. CAUTLEY

A thesis submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

at the

UNIVERSITY OF WISCONSIN-MADISON

1989

APPROVED

Doris P. Slesinger, Ph.D.
Professor of Sociology
and Rural Sociology

Dec 4, 1989
Date

TABLE OF CONTENTS

LIST OF TABLES

ACKNOWLEDGEMENTS

This thesis was completed with the encouragement and support of many people. The Department of Rural Sociology has been my intellectual home for 15 years, and the environment that the Department provided was especially supportive in my completion of this work. Many staff and students played a role in creating this atmosphere. I would like especially to thank Pilar Parra, Josephine Beoku-Betts, Francine Horton, and Mochammad Sjachrani for their friendship and advice. Most importantly, I want to acknowledge the special support given me by my academic advisor and long-time employer, Professor Doris P. Slesinger. This thesis would not have been possible without her patience, advice, and encouragement. I have benefitted from her teaching in more ways than I can list. Doris' commitment to sociology as a path to bettering the world for the disadvantaged has helped convince me that this work is worthwhile. Thank you, Doris.

The data set used for this analysis is the product of the labor of several people. The 1980 Census data tapes were graciously provided by Professor Glenn V. Fuguitt and Research Assistant Robert Jenkins. Additional variables were created by Cheryl Knobeloch; Professor James Sweet generously provided access to these

variables. Bruce Christenson designed the stratified sampling method and assisted with many details of the data sampling and weighting process. I especially wish to thank him for the conceptual design of the weighting procedure.

Some of the financial support for this work came from a Cooperative Agreement with the Economic Research Service, United States Department of Agriculture, and I particularly want to thank Dr. Peggy Ross. Computing hardware and software used for this research was provided by the Center for Demography and Ecology, NCCHD grant HD-05876.

I would like to thank Professor Sara McLanahan and Professor James Sweet for serving on my master's examining committee. Their insightful comments have helped improve this work.

Karen Morgan's very able assistance in word processing has eased the way for me many times, and I thank her for her special assistance on this project. I also appreciate the encouragement of my new colleagues at the Center for Health Statistics. Last and certainly not least, I want to thank my family and friends for their unfailing support during this project. I especially want to acknowledge the encouragement I received from J. Michael Blohm; his friendship has been a great source of comfort during all the trials and tribulations of completing this thesis.

ABSTRACT

Single mother households experience very high levels of poverty as well as high levels of labor force participation. This research examines household composition and labor force participation for single mother households in urban and rural areas. A sample of 1980 U.S. Census data is used which classifies residence into central city, suburb, small town and rural areas. Overall, single mother households in small town and rural areas experience poverty levels as high or higher than those in central city and suburban areas, when controlling for characteristics of the single mother.

Using family poverty status as the dependent variable, this thesis confirms the hypothesis that extra adults living in the single mother's household, and earnings from employment of these extra adults, are both associated with decreased family poverty levels. These relationships remain strong when controlling for race, education, marital status and age of the single mother. Employment of the single mother stands out clearly as the single most important variable associated with decreased family poverty.

Analysis of poverty across the rural-urban continuum provides mixed evidence for employment. Among employed single mothers,

highest poverty levels occur in small towns, followed by central cities, rural areas and suburbs. Effects of unobserved variables such as pay scales appear to influence poverty levels among employed mothers. Policy recommendations include wage equity policies across geographic areas, increased levels of support from absent fathers, and assistance with costs of day care and health care for single parents.

RURAL-URBAN DIFFERENCES IN EMPLOYMENT, HOUSEHOLD COMPOSITION, AND POVERTY STATUS AMONG SINGLE MOTHERS

Single mothers have been the focus of a great deal of research in recent years. The dramatic growth in this population has been well documented. The number of single mother families with minor children increased from 2.9 million in 1970 to 5 million in 1980, and continues to increase at a steady rate. As a proportion of all families with minor children, single mother families have increased dramatically: from 10.2 percent in 1970 to 16.7 percent in 1980 (U.S. Bureau of the Census, 1971 and 1981). The very high poverty rates among single mother families have also been investigated. In 1979, for example, 40 percent of single mother families were poor, while only 8 percent of all other families with minor children were poor (U.S. Bureau of the Census, 1983, Table 108). The term "feminization of poverty" served to focus even more attention on the problems of single mothers and their children. Of all poor families with children in 1979, 53 percent were single mother families. This has led to concern for the long-term consequences of poverty for so many mothers and children as well as concerns with implications for the welfare system.

Often overlooked in this crisis of the feminization of poverty is the fact that a large proportion of single mothers are employed. Increases in the labor force participation rates of all women have been well documented: 43 percent of all women were in the labor force in 1970; this increased to 52 percent in 1980 and to 54 percent in 1985. (All data in this paragraph are from Taeuber and Valdisera, 1986 except where noted.) Employment rates of mothers are increasing at an even faster pace: while 40 percent of married mothers with children under 18 were in the labor force in 1970, this jumped to 54 percent in 1980 and to over 60 percent in 1985. The high labor force participation rates of single mothers in particular, however, are rarely noted. In 1970, 59 percent of single mothers with minor children were in the labor force, and this increased to 68 percent in 1980 (U.S. Bureau of the Census, 1984, Table 274). Despite these high rates of employment, single mothers and their children are one of the poorest groups in the United States today.

This research looks more closely at the characteristics of single mother households, and at the relationship between employment and poverty among these households. There are several important facets to this relationship, which will be examined in detail here. These facets include household composition and employment status of household members. Other factors, including characteristics of the mother, also affect poverty status. Area of residence is another facet: characteristics of rural and urban women differ, and urban

women have different options for employment than do rural women. This study will describe differences between single mother households in rural and urban areas, and examine the relationship between employment and poverty.

PREVIOUS RESEARCH

Poverty status is measured by comparing family income to a federal poverty threshold specific to family size. Families with incomes above the threshold are not poor; below it they are poor. Thus it is an absolute index of family income adequacy; it is not a relative index which could address issues of income distribution and inequality. The federal poverty thresholds have been in use since 1960, with some modifications over the years. The thresholds are inflated yearly with the Consumer Price Index. A very large body of literature examines causes and correlates of poverty in the United States. There is strong agreement among researchers that being poor is clearly related to one's race, educational attainment, gender, and participation in the labor force. It is also generally understood that poverty is not solely attributable to individual characteristics; social class and societal institutions are also a part of the causal model.

This section reviews the literature on women and poverty status, with special attention to: 1) rural-urban comparisons; 2) household composition; and 3) labor force participation. Some of the research concerns all women, some concerns only married women or married mothers, and some concerns just single mothers.

Rural-Urban Comparisons

There are two different ways of defining rural and urban residence in the United States. The more commonly used definition distinguishes between metropolitan and nonmetropolitan residence. Each county in the United States is classified as either metro or nonmetro; metro counties generally have a city of 50,000 or more surrounded by additional urbanized area, or they are adjacent counties economically tied to the central city county. Nonmetro counties make up the balance of the country. At the time of the 1980 census, almost 75 percent of the U.S. population lived in metropolitan areas. The other definition of rural and urban residence uses a smaller level of geography, and divides the nation into Urbanized Areas and outside of Urbanized Areas. Urbanized areas generally include a central city of 50,000 or more inhabitants plus the closely settled suburbs. The remaining area includes two additional groupings: rural areas, which are towns smaller than 2,500 and the open countryside; and other urban areas, consisting of towns of 2,500 or more. In 1980, 61.4 percent of the population lived in urbanized areas.

Relatively little research has used rural-urban, rather than metro-nonmetro, comparisons of populations. Hanson (1982), defining rural as communities with less than 2,500 persons, found significant differences between women from rural and urban backgrounds in terms of their occupational status and earnings. Rural women who migrated

to urban areas improved their occupational status, but never caught up with women who came from urban backgrounds. Hanson concludes that her findings support both the theory of segmented labor markets, and the importance of the interaction between human capital variables and structural differences in urban and rural labor markets. Cautley and Slesinger (1988), using the Urbanized Area concept, find rural single mothers earn lower wages than urban mothers, with the difference being primarily due to lower pay scales in rural areas, and not to differing occupational structures. Much of the literature on rural women concerns only farm women (Haney, 1983); Haney states the need for much more research to be done.

A much larger body of research compares metropolitan and nonmetropolitan populations (Hoppe, 1988; McGranahan et al., 1986; McLaughlin and Sachs, 1988; O'Hare, 1988; Weinberg, 1987). While Wilson et al. (1987) have argued that poverty is increasingly a metropolitan problem, due to the size of the poor population in central cities, the poverty rate in nonmetropolitan areas has become perhaps more entrenched. Deavers, Hoppe and Ross (1986) note that not only is the nonmetropolitan poverty rate consistently higher than the metropolitan rate, but there were numerically more poor persons in nonmetropolitan counties than in central cities in 1983. Ghelfi (1986) points out that 93 percent of black nonmetropolitan families live in the South, where they experience poverty rates much higher than the national average, and indeed higher than blacks in any other region, metropolitan or nonmetropolitan. Ross and

Morrissey (1986) found that persistent poverty, defined as being poor during 3 or more years in a 5 year period, was more prevalent in nonmetropolitan than in metropolitan areas. Using data from the Panel Study of Income Dynamics (PSID) for 1978-1982, Ross and Morrissey find that 8.4 percent of nonmetropolitan residents were persistently poor, as contrasted with 5.1 percent of metropolitan residents.

Household Composition

Single mother families have been an increasing proportion of all families with minor children since 1950. Research on the causes for this growth of single mother families from 1970 to 1980 reveals distinct differences by race: for white single mothers, marital disruption is the primary component, followed by population growth. For blacks, population growth, followed by increases in both never married women and marital disruption, are the major components (Wojtkiewicz, McLanahan and Garfinkel, 1987). Research on trends in divorce and family disruption indicate that the pattern of increasing single mother families is not likely to change in the foreseeable future. Using 1985 data, Castro and Bumpass (1987) conclude that trends in separation and divorce are not decreasing, as some have described, but will probably remain at relatively high levels. Bumpass calculates that "about two-fifths of children born to married mothers will experience the disruption of that marriage" before reaching adulthood (1984:71).

The research on single mothers and poverty is recent and extensive (Bane, 1986; Duncan and Rodgers, 1987; Garfinkel and McLanahan, 1985, 1986; Goldberg and Kremen, 1987; Kniesner, McElroy and Wilcox, 1986; McLanahan, Garfinkel and Watson, 1986). The increase of single mothers with children as a proportion of the poor population has been well documented: 26.7 percent of the poor lived in single mother households in 1970 and 33.2 percent in 1980. This increasing proportion is due to two factors: the growth of the single mother family population, and declining poverty rates among other groups, particularly the elderly (Garfinkel and McLanahan, 1985). Although the actual poverty rates experienced by single mother families have declined slightly from 1960 to 1980, their poverty rates are consistently much higher than those of two parent families, and this has been true since at least 1967 (Garfinkel and McLanahan, 1986). In their definitive work on the prevalence and welfare dependence of single mothers, Garfinkel and McLanahan (1986) discuss three major reasons for high poverty levels among single mother families: low wages and limited earning power for many mothers who head households; low or zero amounts of child support paid by absent fathers; very low levels of support provided by most public assistance programs.

A comparison of single mother families and married couple families clarifies the reasons for higher poverty among single mothers. Although the average earnings of single mothers are somewhat greater than those of married mothers, they are extremely

low in comparison to earnings of married fathers (Bane and Ellwood, 1989). The child support paid by absent fathers is inconsequential when compared to average earnings of married fathers. Bane and Ellwood (1989) also present data to demonstrate the work disincentive effects of welfare program benefits. The single mother who works full time at a wage of $6 per hour will have a maximum of $3000 more disposable income compared to the full time welfare recipient, and she will not have access to Medicaid health care benefits. Only the mothers who have significant work experience or higher levels of education are likely to benefit from working instead of receiving welfare.

Bane and Ellwood (1986) present a classification of events which are associated with the beginning and ending of a "spell" of poverty. For single mothers, the change to a female-headed family from another family type accounts for over half of all beginnings; declining earnings of household members accounts for another one-quarter of transitions into poverty. One-third of poverty periods for single mothers end when the mother's income increases. Another one-fourth end with marriage of the mother, almost one-fifth end with an increase in unearned income, and another one-fifth end when earnings of other household members increased. Thus, changes in household composition are most important for initiating poverty spells, while increases in household income are most important in ending them.

Bane (1986) challenges the assumption that changes in family

structure cause poverty. Using PSID data on transitions of individuals into poverty (lasting one year or more), she tabulates poverty spells that began before, simultaneous to, and after a transition to a female headed household. Periods of poverty beginning simultaneously with a family structure transition are "event-driven", while transitions occurring to already-poor families are merely "reshuffling" existing poverty into new households. There are striking differences between whites and blacks: for whites, 14 percent of poverty spells began before the household transition, 49 percent were simultaneous, and 37 percent began after transition; for blacks, 33 percent were before, 22 percent simultaneous, and 45 percent after. Bane concludes that "[m]ost poverty, even that of female-headed families, occurs because of income or job changes." (1986:231).

The length of time that a family may spend in poverty varies widely, especially by race. Blacks are likely to have a period of poverty averaging 6.5 years, or almost twice the 3.4 years for whites (Bane and Ellwood, 1986). Thus, black single mothers will be disproportionately represented in a cross-sectional sample of poor single mother families.

Garfinkel and McLanahan (1986:Tables 1-2) show a strong relationship of marital status and race with source of income for single mother families. For example, the proportion of divorced mothers with earned income is much higher than for any other marital status. Not surprisingly, widows are much more likely to have

Social Security income than are other women. In general, the proportions of black mothers receiving each type of income are lower than the proportions of white women. The exceptions occur in the public assistance and food stamp categories, with black mothers averaging more income from these sources than whites.

Overall, widows with children are much less likely to be poor than are other single mothers, mainly due to higher benefit levels paid by Social Security as compared to other income transfer programs. Among white single mothers, widows have the highest income while, among blacks, divorced mothers' income is highest on average.

Labor Force Participation

The literature on women in the labor force is quite extensive, but relatively little focuses on single mothers as an analytic entity. Until recently, much of the analysis focused on labor force activity of wives (Sweet, 1973; Smith-Lovin and Tickamyer, 1981). Traditionally, wives left the labor force, often for an extended period of time, after the birth of a child. Smith-Lovin and Tickamyer (1981) found two very different patterns for wives -- "workers" were those who tended to remain continuously in the labor force during childbearing years while "nonworkers" dropped out of the labor force at time of first birth and rarely returned. Sweet (1973) found that wives' employment rates increased as age of youngest child increased. Labor force participation rates of wives

have increased steadily since 1950, with the largest proportional increases occurring among mothers of young children. In 1950, 12 percent of wives with a child under six years were employed; in 1980, 45 percent were employed (Taeuber and Valdisera, 1986).

Recent research has focused on this increasing labor force participation of mothers, including those with very young children (O'Connell and Bloom, 1987). The increase in working mothers prompted interest in child care arrangements used by working mothers (Presser and Baldwin, 1980; O'Connell and Bloom, 1987) and the variations in shifts used by working parents to accommodate child care needs (Presser, 1986).

Although men are more likely than women to be in the labor force, and more likely to be full time year round workers, the gap in proportion working between men and women is narrowing. Among employed women in 1984, 48 percent were full time year-round workers (Taeuber and Valdisera, 1986). The overall increasing labor force participation of women has been due primarily to increases in full time work (i.e., 35 hours or more per week). Currently, two-thirds of all employed women are full time workers (Taeuber and Valdisera, 1986).

In general, black women have higher labor force participation rates than white women. Historically, nonwhite women's labor force rates have been higher than white rates, at least since 1890; the nonwhite and white rates have slowly converged over the decades (Sweet, 1973; Bianchi and Spain, 1986). More recently, the

difference between black and white women has narrowed considerably: in 1985, 56 percent of black women age 16 and over were in the labor force, compared to 54 percent of similar white women (Taeuber and Valdisera, 1986). Among women under age 25, white women have had, and continue to have, higher labor force participation rates than black women.

One of the most striking results of research on female labor force participation is the clear differentiation between jobs available to women and to men (Waite, 1981; Bergmann, 1986). This sex segregation of occupations is due to a combination of factors, including availability of a female labor supply that is educated and skilled, willing to work for lower wages than men, and seen as possessing attributes desirable to employers (Oppenheimer, 1970). There is some evidence of slowly declining occupational sex segregation over the decades. Using 1900, 1950, and 1980 Census data with consistent occupation coding, Jacobs (1987) finds that both differences between sexes in occupations and the degree of concentration of women in occupations, as measured by an index of dissimilarity, have declined since 1900. Thus, women have become more widely dispersed among occupations relative to their position in 1900, but even in 1980 continue to be more concentrated in specific occupations than men.

One of the consequences of occupational sex segregation is a lower wage scale for women than for men in all occupations (Bianchi and Spain, 1986; Bergmann, 1986; Scott, 1984). On average, women

who worked full time all year earned 60 percent of the comparable male earnings in 1980. This ratio of women's to men's earnings has barely changed since 1955, showing only a small increase since 1982 (Bianchi and Spain, 1986; Bergmann, 1986). The change seems to be occurring for young women first: median earnings of full time year-round employed women age 25-29 in 1982 were 76 percent of the comparable median earnings for men (Blau and Ferber, 1985).

Some research has compared overall female labor force participation in metropolitan and nonmetropolitan areas (Brown and O'Leary, 1979; Bokemeier, Sachs and Keith, 1983). Women's labor force participation rates have been consistently higher in metropolitan than in nonmetropolitan areas, at least since 1960. Rates for women with children, however, are very similar in metropolitan and nonmetropolitan areas (McGranahan et al., 1986). The characteristics of women in the labor force differ between metropolitan and nonmetropolitan areas in terms of educational attainment, age, and part-time/full-time work. Nonmetropolitan women on average have lower education levels, older mean age, and a larger proportion work full time (Bokemeier, Sachs and Keith, 1983). Bokemeier and Tickamyer's (1985) study of employed nonmetropolitan women in differing regions concluded that "the important distinction in most aspects of labor force experience is not locational differences within nonmetro regions but, instead, the difference ... that occurs between metro and nonmetro areas." (1985:67)

Household composition is related to labor force participation among women. Using 1980 data on extended family households, Tienda and Glass (1985) find that the presence of nonnuclear adults (i.e., persons other than spouse or child of head) affects labor force participation of single mother heads of households. If the nonnuclear adults were unemployed women or employed men or women, the authors observed increased labor force participation of the female head.

There is relatively little research on single mothers in the labor force. Some of the research focuses on the increased labor force activity of mothers following a divorce (Bergmann, 1986). Studies of trends over time in employment of single mothers are also scarce, partly because the category of single mother is not clearly specified in older data sets. In one of the few studies examining employment and poverty in female-headed households, McLaughlin and Sachs report that employment "reduces the likelihood that a household will be in poverty in all residence areas" (1988:298) but the reduction in poverty is greater in central cities than in nonmetropolitan areas.

Currently, single mothers continue to have the highest labor force participation rates among all mothers, but the rate of increase is much greater for married mothers. Average earnings of single mothers are also somewhat greater than those of married mothers (Bane and Ellwood, 1989). In comparison to married couples with children, however, single mothers' earnings from employment are

much smaller. This is due not only to the disadvantages that all women experience in the labor market, such as lower average earnings and limited access to some types of work, but also to working less than full time all year. This is due to the competing demands on a single mother's time, including child care and household management as well as employment demands. Thus, employment patterns of single mothers resemble those of married mothers much more than those of married fathers (Bane and Ellwood, 1989).

Most of the recent work on single mothers has focused on issues of increasing prevalence, welfare dependence, extreme poverty, and differences between black and white families. This research will examine single mother households in 1980, specifically examining household composition and levels of employment as related to poverty in these households.

THEORY AND HYPOTHESES

The research questions posed here revolve around the rural-urban area of residence concept, which has been described as a continuum of population size and density. (This entire discussion is based on Willits, Bealer and Crider, 1982 and Bealer, Willits and Kuvlesky, 1965.) "Rural" represents one extreme -- areas where the population is small and widely scattered -- while central cities of urban areas are the other extreme of the continuum, with large, densely settled populations. Theoretically, these variations in settlement are presumed to affect social life in several important ways. First, greater population density often is accompanied by greater availability of services. For example, more choice of child care services, more adult education opportunities, and more health care facilities would be expected to be available in urban areas as compared to rural ones. More readily available public transportation in urban areas accompanies services, making them accessible to those without a private car.

The rural-urban continuum is also seen as a continuum of changing values, with greater acceptance of diverse life styles in urban areas, and greater importance attached to traditional values in rural areas. The greater prevalence of married-couple families as a proportion of all families in rural areas (as compared to urban

areas) is seen as evidence of such traditionalism.

Finally, the rural-urban continuum is seen by some as part of the dual labor market structure. That is, the peripheral sector of the dual labor market is over-represented in rural areas which have small firms with lower wages, no unions, low profits, labor intensive work, and concentration in peripheral or extractive industries, such as agriculture and textiles manufacturing (Hanson, 1982; Beck, Horan and Tolbert, 1978).

For some time, the rural-urban continuum was thought to be contracting -- that is, the differences between rural and urban areas were disappearing in the face of increased communication and transportation. McGranahan et al. (1986) cite decreasing urban-rural differentials in fertility, female labor force participation rates, and poverty rates as examples of the "convergence" between rural and urban areas. The rate of convergence, however, dramatically slowed during the 1970s, as urban areas experienced much more widespread changes in family structure and female labor force participation. McGranahan et al. conclude that "it may no longer be useful to think of rural areas as becoming economically and socially more like urban areas." (1986:41)

Although we can speculate that urban areas are merely leading the way, and that rural areas will experience similar social changes later in time, the continuum remains a useful concept for research. Comparative work shows differences in family structures, occupations, industries, earnings, and poverty status between urban

and rural areas. Studies of poverty find both individual and structural characteristics important in explaining variance in poverty rates across residence groups. In this research, residence is seen as a structural characteristic, expected to have an impact on poverty status independent of other characteristics.

The experience of the poor in urban and rural areas differs with respect to the nature of their isolation from the nonpoor. In central cities of large urban areas, the poor are often physically isolated from the rest of the city. Low income housing serves to concentrate racial minorities in ghetto areas, which many rarely leave. Shopping, schools and social service offices are all available in the ghetto or nearby, so that many residents never have to leave the poorest areas of the city in their normal day-to-day lives. Only residents with employment elsewhere in the city are exposed to the nonpoor population on a regular basis.

In rural areas, the physical segregation of the poor is often less pronounced. In order to shop, work, attend schools and obtain social services, the poor mix with the nonpoor on a regular basis. There are fewer choices of places to conduct business in rural areas, as well as less segregated schools, so the poor experience less isolation from the nonpoor. This may be less true in persistently poor rural areas, where large proportions of the population have been continuously poor for many decades. In such places, their experiences may be more similar to those of central city residents.

Factors concerning single mother's participation in the labor force are also very relevant to this research. Single mothers are more likely to be poor than married mothers because they are responsible for the dual roles of breadwinner and child caretaker, without having a partner sharing the roles. Many two parent families now have two wage earners; single parents are limited to their own wages in supporting a family. Women's average wages are lower than men's, leading to a much greater likelihood that employed single mothers will have difficulty supporting a family on one wage. Single mothers are additionally disadvantaged in the labor force by being fully responsible for child care as well. Either her wage must be high enough to pay for child care in addition to all family living expenses, or she must have a free source of child care such as a nearby relative who is not employed. Single mothers work more hours on average than do married mothers, but less than married fathers, contributing to greater reductions in earned income. Some single mothers receive support from absent fathers, but this has generally been a very small and unreliable part of their income. An alternative to employment is the welfare system for single mothers, but this is advantageous only to the least employable mothers. Current levels of benefits force families to live on a poverty-level income. The current welfare system includes work disincentives, making exit from the system difficult for many.

Now that many married mothers are employed, single mothers are also expected to find employment. But the support systems available

to married mothers are lacking for many single mothers. Some live with other family members to share living expenses or child care responsibility. An additional adult can provide household income and/or child care, but an extra person can also be a drain on family income and resources. This research will test several hypotheses related to the composition of single mother households, examining both the presence and the employment of additional adults.

Hypotheses

Hypothesis 1. Poverty rates for single mother households are lower in urban areas than in rural areas.

Prior research has shown that rural populations are more likely to be poor than are urban populations. The rural-urban continuum suggests that rural single mother households are disadvantaged in several ways, as compared to similar urban households: fewer support services are available, the single mother family is a less traditional and less acceptable form of family than the two-parent family, and the rural labor market structure is more disadvantageous for women than is the urban one.

Hypothesis 2. Poverty rates in single mother households are lower in households without an extra adult present than in households where an adult in addition to the head is present.

We know that some single mothers choose to live with male partners or other adults. These arrangements can be seen as alternatives to marriage -- attempts to share the family headship

and breadwinner roles with another adult. Since women are generally at a disadvantage in the labor market, earning less on average than men, some women will seek other ways to gain economic advantage. Sharing the costs of shelter and other living expenses, or sharing the work of keeping a home and caring for children with a friend or relative is an option for some women.

Hypothesis 2A. Among households with an extra adult present, poverty rates are lower in urban as compared to rural areas.

Rural households are disadvantaged in several ways, making access to employment and income more difficult. With rural pay scales generally lower than urban ones, any advantage of having an extra adult in the household to share expenses or work may be lost.

Hypothesis 3. Single mother households with employed adults have lower poverty rates than households with no employed adults.

It is very clear that employment is inversely related to poverty levels. This research looks at employment of the single mother and the numbers of other employed persons in the household.

Hypothesis 3A. Among single mother households with employed adults, urban households have lower poverty rates than rural households.

Prior research has shown that levels of employment in rural areas are generally higher than in urban areas. We also know, however, that wage scales in rural areas are generally lower than in urban areas. The disadvantages to the employed worker of being in a rural area will outweigh the advantages.

These five hypotheses will be tested on a random sample of single mother households, described in the next section.

Previous research has indicated that poverty rates are highly correlated with race, education, marital status and age. Thus, in testing the five hypotheses, I will control for the effects of these sociodemographic variables.

METHODOLOGY

Sample

United States Census data were selected for this research because they offer a reliable national data set that includes information on every household member, such as age, sex, and employment status. Family poverty status, another important variable, is also available. The data used for this analysis were extracted in a series of steps from the 1980 U.S. Census of Population, Public Use Microdata Sample (PUMS), C Sample. The C Sample was chosen because it is the only Census data set with area of residence coded for urban and rural areas.

The household is the unit of analysis in this study. The final random sample represents all female headed family households in the United States with at least one own child under age 18 and no husband present, stratified by urban and rural residence. There were 4.9 million such households in 1980. The unweighted number of households in this sample is 5,712; when weighted, the number of households in the sample is 5,796. Of these households, 1,600 or 27.6 percent are rural and 4,196 or 72.4 percent are urban. Published Census data derived from the PUMS files show that 27.5 percent of such households are rural and 72.5 percent are urban (U.S. Bureau of the Census, 1983:Table 100), giving evidence that

this sample is an accurate random sample of the PUMS file. Details of the sampling, weighting, and data extract are provided in Appendix A. All data are weighted when presented here.

Definitions

The term "single mother" has widespread usage. It is used here to label women who head family households with no husband present and with one or more own child under age 18 in the household. Single mothers are also referred to as heads of households in this analysis. Single mother households are defined as all persons living in the housing unit, whether or not they are related to the single mother.

Variables

A large set of variables from the PUMS data set was used in this analysis, and several additional variables were created.

Rural-Urban Status

One of the most crucial variables is the rural-urban area of residence classification created by the Census Bureau. The PUMS C Sample data were selected specifically because of the availability of this variable. The rural-urban variable distinguishes four categories of rural-urban residence:

- central city of urbanized area
- urban fringe
- urban outside urbanized areas
- rural.

The first two categories together make up the Urbanized Area grouping, while the latter two are Outside Urbanized Area. Urbanized Areas are defined as "a concentration of at least 50,000 people that usually includes a central city and surrounding closely settled suburbs. Generally, population density is 1,000 or more persons per square mile." (Cautley and Slesinger, 1988:808) Urbanized Areas are further divided into central cities and urban fringe. Outside Urbanized Areas are all places of 2,500 or more persons, generally up to 50,000 persons at most, which are not included in the Urbanized Area definition. Rural areas are places of less than 2,500 plus open countryside. Further details are available in U.S. Bureau of the Census (1982).

Thus, this rural-urban variable specifies an area of residence characterized by varying population size and density. This variable is preferable to the more commonly used metropolitan-nonmetropolitan classification of residence simply because it is a more refined measure. It presumably introduces less error into the analysis because, instead of classifying entire counties, the rural-urban variable classifies smaller and more homogeneous areas.

The labels used in this analysis for the four rural-urban residence areas are:

Central City: central city of urbanized area

Suburb: outside central city, within urbanized area

Small town: outside urbanized area, within place of 2,500 or more inhabitants

Rural: towns of less than 2,500, and remaining area.

In order to test some hypotheses, urbanized area residents (central city and suburb) will be considered "urban" while the residents outside of urbanized areas will be considered "rural".

Household Composition

A variable with three categories was created to describe household composition. Every household was classified into one of the following categories:

1) mother living with children, all of whom are under age 18;
2) mother living with children, including both one or more under age 18, and one or more age 18 or older;
3) mother living with children, including one or more under age 18, and at least one adult (age 18 or more) who is not her child. This person can be her parent, sibling, other relative, or non-relative. She may have an adult child living with her in addition to this extra adult.

In addition, two new variables were created for children in the household: age of youngest own child, and total number of own children. These variables provide a more complete picture of the children residing in the households than do the standard PUMS variables.

Labor Force Participation

Employment status during 1979 is available for the household head and all other household members. A new variable was created to represent the employment status of household heads. Two variables -- weeks worked in 1979 and usual hours worked per week in 1979 -- were combined by multiplication and recoded to make one variable: employment status. Women who were employed between 1 and 1749 hours during 1979 were labeled part time employees, while those employed 1750 or more hours were labeled full time. The third grouping in this new variable consists of women who were not employed at all during 1979.

Number of adults earning income in each household was calculated by counting all persons over age 17 who had any income in 1979 from wages, salaries, or self-employment. This variable includes all adults in the household, except the head. Early analysis showed this variable to be very similar to number of employed adults in the household.

Poverty Status

Another very important variable provided by the Census data is poverty status. This variable is based on family income relative to poverty thresholds established by the federal government; there are different thresholds for differing family sizes. In parts of this analysis a collapsed version with two poverty values is used: 1) income is below poverty threshold; 2) income is at or above poverty threshold. These two groups are referred to as the poor and nonpoor.

In order to use poverty status as the dependent variable in a multiple regression model, it is recoded as a continuous variable, using the federal poverty thresholds for every combination of family size and number of children under 18, up to a maximum of 9 persons in a family with 8 minor children (U.S. Bureau of the Census, 1982:35). Family income is divided by the poverty threshold appropriate to that family's size, and the result is divided by 100 and rounded off. This yields a percent of poverty threshold that is more precise than the conventional groupings. This variable is labeled the "income-needs ratio" for analysis. The value of this variable ranges from -119 to 1500, with a mean of 153.4 percent. The negative values represent families that had a net loss of income in 1979; these values are recoded to 0 for this analysis.

While households are the unit of analysis here, poverty status is a family variable. That is, it pertains to the income of only those household members who are related to the head by blood, marriage, or adoption. Single mother households may contain unrelated persons in addition to the single mother's family. In this sample, 575 households (9.9 percent) include one or more unrelated persons. Because the poverty status of these persons may differ from that of the single mother family, an analysis of these households was conducted. The results were that 43 percent of these unrelated persons had a poverty status differing from the head. Details of this analysis are included in Appendix B.

Demographic Characteristics

In addition to these variables, demographic characteristics of the single mother head of household were also included in this analysis: age, race, educational attainment, and marital status.

Limitations on Census Data

Census data were collected on April 1, 1980. Area of residence, marital status and household composition all pertain to that date while family income, poverty status and employment data all pertain to 1979. Thus there is a certain amount of inaccuracy introduced in an analysis such as this, in which data valid for two separate points in time are analyzed together. For example, some of the households included in this sample were not single mother households during 1979, but we use their employment and poverty status for 1979 in this analysis. Some of the families that were poor in 1979 are not poor in 1980, but they are analyzed as poor families here. There is no solution to this dilemma, but it is important to recognize it.

The PUMS data files have been edited so that no missing data remain. All missing items are replaced through allocation of responses from other persons with similar characteristics and through substitution when an entire person record is missing. These procedures eliminate all the problems a researcher faces with missing data, but they also introduce additional error into the data set.

The 1980 Census is estimated to be very close to a full count. The small undercount occurred mainly among poor, black, southern, and male population groups. Poverty status is a crucial variable in this analysis. Because this analysis includes large groups of poor and black families, it is likely that the undercount has a slight effect on the proportions poor estimated in this study. This could result in slight underestimation of poverty levels.

Census data, as well as one-time survey data, provide a snapshot view of the world -- this has serious limitations in an attempt to understand poverty status. Because blacks remain poor for longer periods of time than do whites, blacks are over-represented in a cross-section of time such as a census (Garfinkel and McLanahan, 1986).

These limitations on census data should be kept in mind but need not prevent an analysis such as this one.

Statistical Methods

This analysis includes a section of descriptive analysis and a multivariate analysis section. The descriptive analysis relies on simple crosstabulations, group means, and proportions in poverty. This section describes the single mother population and specifies the variables to be used in the multivariate analysis.

Two methods are used in the multivariate analysis: multiple classification analysis (MCA) and ordinary least squares multiple regression analysis. Some of the regression results are tested for

significance with the General F Test (also called the General Linear Test).

Multiple classification analysis is a form of multiple regression analysis that is appropriate to use when some of the independent variables are categorical rather than continuous, and when there is a dichotomous dependent variable with response categories greater than 15 percent and less than 85 percent (Andrews et al, 1973). MCA results are presented as unadjusted and adjusted means. Unadjusted means are mean values of the dependent variable for each category of the independent variables; this is identical to crosstabulations of the independent and dependent variables. Adjusted means are dependent variable means for each category of independent variables also, controlling for the effects of all other independent variables in the model. As with multiple regression, the multiple R-squared statistic is used to indicate proportion of variance explained in the dependent variable. The Beta statistic is used to measure "the ability of the predictor to explain variation in the dependent variable after adjusting for the effects of all other predictors." (Andrews et al., 1973:7). This is an indication of relative importance only.

Multiple regression analysis is used to estimate regression coefficients for several independent variables, while controlling for the effects of other variables. The dependent variable used for the regression models here is an approximation of a continuous variable. The standardized regression coefficients, similar to the

MCA Beta statistic, are indicators of "change in the mean response [of the dependent variable] per unit change in the independent variable when all other independent variables are held constant." (Neter, Wasserman and Kutner, 1983:262) The R-squared statistic (or the coefficient of multiple determination) indicates proportion of variance explained in the dependent variable. The General F Test is used to test whether the addition of new variables to the model significantly improves the proportion of variance explained. This is also a test of whether the regression coefficients of the new variables are significantly different from zero.

DATA ANALYSIS

Characteristics of Single Mothers and Their Households

This data set represents all single mother households in the United States in 1980. There were 5 million such households; 17 percent of all family households with minor children were single mother households. This analysis provides a description of single mother households, with special attention to the differences between households in rural and urban areas.

Single mothers in this sample range in age from 16 to 84. Because of the Census Bureau definition of a household, no head of household can be under age 16, constraining the lower age limit. The small group of elderly mothers (0.3 percent are age 65-84) are presumably grandmothers raising their grandchildren.

Table 1 presents data on several characteristics of single mothers in this sample, for both the total group and the four rural-urban residential areas. By far the largest proportion of single mothers live in central cities (43.5 percent), followed by residence in suburban areas (28.9 percent). Much smaller groups live in rural areas (15.2 percent) and small towns (12.4 percent).

Comparing the residential areas, several differences in characteristics are clear. While the average age of all single mothers is 35.3 years, mothers residing in central cities are

Table 3

Characteristics of Single Mothers by Urban-Rural Residence, 1980

Characteristics	Central City	Suburb	Small Town	Rural	Total Number	Total Percent
Age						
16-19	1.5%	1.0%	1.0%	0.7%	68	1.2%
20-29	31.9	24.9	30.1	23.7	1,645	28.4
30-39	40.1	42.6	36.3	38.6	2,325	40.1
40-49	18.7	22.2	23.2	25.2	1,231	21.2
50+	7.8	9.3	9.4	11.8	526	8.5
Mean Age	34.4	35.8	35.6	37.0		35.3
Race						
White	42.8	76.1	73.6	79.5	3,581	61.8
Black	49.2	19.3	22.2	15.9	1,863	32.2
Other	8.0	4.6	4.2	4.6	351	6.0
Education						
0-8 years	12.6	7.9	15.2	16.2	702	12.1
9-11 years	25.9	17.3	23.3	22.3	1,307	22.6
12 years	39.0	46.9	40.8	42.7	2,439	42.1
13+ years	22.5	27.9	20.7	18.8	1,348	23.3
Marital Status						
Ever Married	75.6	87.8	88.5	90.4	4,810	83.0
Widowed	9.2	10.6	13.9	20.7	692	11.9
Divorced	38.6	54.9	50.7	49.0	2,689	46.4
Separated	24.1	19.5	18.3	16.7	1,214	20.9
Married	3.7	2.9	5.5	3.9	215	3.7
Never Married	24.4	12.2	11.5	9.6	986	17.0
Employment, 1979						
None	36.4	23.3	27.1	28.3	1,752	30.2
Employed	63.6	76.7	72.9	71.7	4,044	69.8
1-1749 hours	27.2	30.3	30.6	31.3	1,688	29.1
1750+ hours	36.5	46.4	42.3	40.4	2,356	40.6
N (weighted)	2,523	1,672	721	879	5,796	
Percent	43.5	28.9	12.4	15.2		100.0

younger, on average, than mothers in other areas. Rural mothers are oldest of the four groups, with 37.0 percent age 40 and older, and an average age of 37.0 years.

About 62 percent of all single mothers are white, and 38 percent are nonwhite. The racial distribution of single mothers in central cities is markedly different from that in other areas. Over half of all central city single mothers are nonwhite, with most being black. In the other residential areas, the proportion of nonwhite single mothers is one-fourth at most.

About 65 percent of all single mothers have completed high school. Suburban single mothers have higher educational attainment than mothers from other residential areas, with 75 percent being high school graduates. The mothers living in the other three residential areas have very similar educational attainment, with about 60 percent high school graduates in each area.

Overall, four-fifths of single mothers have ever been married; almost half of all single mothers are divorced. Central city mothers are much less likely to have ever married than mothers living in other areas; three-fourths of central city mothers have been married, while 88 to 90 percent of all other single mothers have been married. The proportion divorced is highest among suburban mothers, while widowhood is most prevalent among rural single mothers. This latter status probably reflects the older average age of rural mothers.

Seventy percent of all single mothers were employed during 1979,

with 40.6 percent being employed full time (as defined by working 1750 or more hours in that year). Proportions employed during 1979 also vary by residential area. The greatest employment is among suburban single mothers (76.7 percent), followed by small town (72.9 percent) and rural (71.7 percent) mothers, while central city mothers have the lowest levels of employment (63.6 percent). Suburban mothers are also more likely to be employed full time than mothers in other areas.

The characteristics of the entire single mother household are deemed important in this research. Table 2 presents information about the composition of these households, again for four residential types as well as for the total sample.

Almost 30 percent of all single mothers have a preschool age child -- that is, age 4 or younger. Central city single mothers are most likely to have a preschool child. Given the older age distribution of rural mothers, it is not surprising to find that a larger proportion of them have no child younger than 15. The mean age of youngest child reflects these differences in age distribution of youngest child.

Forty-four percent of single mothers have one minor child living with them, 33 percent have two, and 23 percent have three or more. Suburban mothers are more likely than others to have only one child (47.4 percent). Central city mothers are more likely to have three or more children, followed by rural mothers. This is reflected in the mean number of children: central city mothers have the largest

Table 2

Composition of Single Mother Households by Urban-Rural Residence, 1980

Characteristics	Central City	Suburb	Small Town	Rural	Total Number	Total Percent
Age of Youngest Own Child						
0-4	33.1	26.2	28.9	24.3	1,696	29.3
5-9	30.0	28.2	30.4	28.4	1,695	29.2
10-14	24.2	28.3	23.2	28.0	1,498	25.9
15-17	12.9	17.3	17.4	19.3	908	15.7
Mean Age of Youngest Own Child	7.7	8.7	8.4	8.9		8.2
Number of Own Children 0-17						
One	41.3	47.4	44.2	45.5	2,553	44.0
Two	33.2	33.4	33.1	30.2	1,901	32.8
Three	15.2	12.7	13.8	14.4	823	14.2
Four	6.5	4.5	5.8	6.5	339	5.8
Five-nine	3.8	1.9	3.1	3.4	180	3.2
Mean Number of Own Children	2.0	1.8	1.9	1.9		1.9
Child Age 18+ Present	18.2	17.6	17.5	20.1	1,058	18.2
Household Composition						
Mother + child(ren) < 18	67.3	69.2	70.8	67.0	3,956	68.3
Mother + children, some 18+	12.8	13.6	11.0	14.2	754	13.0
Mother + children + others 18+	19.8	17.3	18.2	18.8	1,085	18.7
Mean Number of Persons in Household	3.6	3.3	3.5	3.5		3.5
Adults Present						
Head only	67.4	69.1	70.9	67.0	3,956	68.3
Two	21.3	22.0	19.1	22.1	1,238	21.4
Three - seven	11.3	8.9	10.0	10.9	601	10.3

continued

Table 2, continued

Total Adult Earners						
None	30.1	18.2	20.9	21.1	1,401	24.2
One	52.9	60.4	60.5	58.2	3,292	56.8
Two - five	17.0	21.4	18.6	20.7	1,104	19.0
N (weighted)	2,523	1,672	721	879	5,796	
Percent	43.5	28.9	12.4	15.2		100.0

average number of children, suburban mothers the smallest, and small town and rural mothers fall in between. Overall, these data present the picture of suburban mothers more likely to have just one child, central city mothers more likely to have several young children, and rural mothers to have teenagers.

Almost one fifth of all single mother households have an adult child present -- that is, a child of the mother who is age 18 or older. Rural households are more likely to have an adult child present than are the other areas.

The household composition variable summarizes persons living in the household with the mother. By definition, all of these households contain at least one minor child along with the single mother. Over two-thirds of all households contain a mother with only minor children. The second largest group consists of households with minor children plus another adult besides the mother -- almost 20 percent of all households are in this group. The smallest proportion of households (13.0 percent) consists of mothers living with both minor and adult children (age 18+). There are no large differences between residential areas for this variable. Small town mothers are most likely to be living with only minor children; central city mothers are somewhat more likely to be living with another adult.

The mean number of persons in these households is 3.5 overall. Central city households are largest on average, with 3.6 persons, followed by small town and rural households with 3.5 persons each,

and finally suburban households with 3.3 persons. Subtracting average number of own children from average household size, there is an average of about 1.6 persons other than own children in these households. One person, of course, is the single mother. The remaining 0.6 person is an adult who is not a child of the mother, or one of very few unrelated minor children in these households.

Another way of looking at household composition is to consider number of adults present. In two-thirds of these households, the single mother is the sole adult. About one-fifth of single mother households have two adults present, and one-tenth have three or more adults. The variations between urban and rural areas are not great; suburban and small town mothers are slightly more likely to be the only adult, while central city and rural mothers are slightly more likely to have another adult present. Central city mothers are most likely to live with two or more additional adults.

In an analysis of adult earners not shown here, it was found that over 99 percent of adult earners were employed during 1979. Thus, the correlation between earning income and employment is extremely high. It was decided to use earners as the variable for analysis here because poverty status is related to income more directly than it is to employment. Any small error in reporting employment is avoided with this choice.

Number of adults who earned any income during 1979 is also shown in Table 2; note that this variable includes the single mother plus any adults living with her. Earned income includes wages, salaries,

and self-employment income. About one-fourth of all households have no adults earning income in 1979, and three-fourths have one or more earners. Within residence areas, central city households are least likely to have adults earning income. Rural, small town, and suburban households have similar proportions with adult earners -- approximately 80 percent. The majority of households with an adult earner have just one; again, the proportion of central city households with one earner is lower than for the other three residence areas.

If only households with an extra adult present are analyzed, this pattern changes slightly (data not shown in Table 2). Central city households are still least likely to have an extra adult earning income (68.6 percent), followed by rural households (76.6 percent), then small town households (80.2 percent). Suburban households continue to be most likely to have an extra earner (81.2 percent).

Poverty status is the dependent variable for this research. Table 3 shows poverty status by area of residence for all single mother families. Overall, 31.0 percent of all families are very poor -- their 1979 income is below 75 percent of the poverty threshold. The depth of poverty is greatest in central cities, with 35.4 percent being very poor. This is followed by small towns (32.7 percent) and rural areas (31.5 percent), while 23.4 percent of suburban families experience this level of poverty. Another 11 percent of all families are in the 75-99 percent of poverty

Table 3

Poverty Status of Single Mother Families
by Urban-Rural Residence, 1979

Poverty Status	Central City	Suburb	Small Town	Rural	Total Number	Total Percent
< 75%	35.4	23.4	32.7	31.5	1,798	31.0
75-99	12.1	9.4	11.8	9.7	635	10.9
100-124	8.4	6.9	10.4	10.9	499	8.6
125-149	7.6	6.9	9.4	7.6	443	7.6
150-174	6.4	7.2	8.4	7.4	408	7.0
175-199	5.0	8.3	4.7	6.6	359	6.2
200+	24.9	37.8	22.5	26.2	1,654	28.5
N (weighted)	2,523	1,672	721	879	5,796	
Percent	43.5	28.9	12.4	15.2		100.0

threshold group. Thus, a total of 42 percent of all single mother families fall below the poverty threshold. As an example of how this translates into money income, for a family of three persons, including two minor children, an income of $5844 or less in 1979 is below the poverty threshold.

At the other extreme, 28.5 percent of all families had income of at least 200 percent of the poverty threshold. Again there are differences by area, with suburban families much more likely to be well off -- 37.8 percent have this level of income. The other three residence groups are closer to 25 percent each with incomes at or above the 200 percent threshold. Small town families are the least likely to have higher family incomes (22.5 percent are at 200 percent of poverty threshold).

Poverty Status and Characteristics of Single Mother Households

This section focuses on findings related to the dependent variable, poverty status, and provides preliminary evidence regarding the five hypotheses. For the total group, Table 4 again indicates that central city residents are most likely to be poor (47.6 percent), followed by small town (44.6 percent) and rural residents (41.2 percent). Suburban residents are least likely to be poor (32.8 percent). This provides partial confirmation for Hypothesis 1, which states that poverty in urban areas is lower than it is in rural areas. Although central city residents are poorer than any other group, a combined urban group (central city and

Table 4

Proportion Poor by Urban-Rural Residence for Characteristics of Single Mother Households, 1979

Characteristics	Central City	Suburb	Small Town	Rural	Total Poor Number	Total Poor Percent
Total Percent Poor:	47.6	32.8	44.6	41.2	2,433	42.0
Race of Head						
White	37.6	28.7	38.8	35.9	1,228	34.3
Black	53.5	45.3	59.9	63.2	994	53.3
Other	64.4	48.5	65.4	56.5	211	60.1
Education of Head						
0-8 years	68.0	61.1	60.6	57.1	445	63.3
9-11 years	67.3	50.4	69.4	51.3	803	61.4
12 years	40.8	28.5	38.5	36.0	874	35.8
13+ years	25.2	21.3	16.5	27.2	311	23.1
Marital Status of Head						
Ever Married	42.0	30.0	41.4	38.9	1,813	37.7
Widowed	32.7	25.8	43.0	30.8	221	31.9
Divorced	31.7	22.4	32.3	33.3	776	28.9
Separated	58.7	49.8	62.8	58.7	689	56.8
Married	63.3	52.4	50.0	67.2	127	59.0
Never Married	65.0	54.0	69.0	62.8	620	62.9

continued

Table 4, continued

Age of Head						
16-19	84.8	92.9	100.0	90.9	61	88.9
20-29	58.6	50.3	60.8	53.4	923	56.1
30-39	44.9	28.7	36.2	39.8	888	38.2
40-49	36.0	22.3	32.2	32.7	379	30.8
50+	37.1	24.1	50.0	36.5	183	34.8
Household Composition						
Mother + child(ren) <18	51.5	36.3	46.9	44.3	1,796	45.4
Mother + children, some 18+	36.1	19.1	29.4	27.2	217	28.8
Mother + children + others 18+	41.6	30.0	44.6	40.6	420	38.7
Adults Present						
Head only	51.5	36.3	46.9	44.3	1,796	45.4
Two	43.0	26.7	39.0	38.1	458	37.0
Three-seven	32.7	21.4	38.7	28.2	180	29.9
Employment of Head						
None	82.5	69.5	76.6	73.9	1,362	77.8
Employed	27.6	21.7	32.7	28.3	1,071	26.5
1-1,749 hours	48.2	45.3	59.8	47.3	822	48.7
1,750+ hours	12.2	6.3	13.0	13.5	249	10.6

continued

Table 4, continued

Total Adult Earners						
None	89.7	78.9	86.8	81.1	1,204	85.9
One	31.9	25.6	36.2	34.6	1,108	30.9
Two-five	21.9	14.3	24.6	19.2	213	19.3
N (weighted)	2,523	1,672	721	879	5,796	
Percent	43.5	28.9	12.4	15.2		100.0

suburb, not shown in table) has a poverty rate of 41.7 percent, while the combined rural group (small town and rural) has a rate of 42.7 percent. Thus, combined rural poverty is slightly higher than combined urban poverty. This demonstrates also the importance of studying four residential areas instead of only two (urban and rural), since sub-group differences are masked in the two categories, particularly in the urban category.

In terms of population density, the urban-rural continuum ranges from central city residents to suburbs, then small towns and rural areas. In terms of poverty status, however, we find throughout this analysis that suburban residents are less likely to be poor than are other residents. Central city residents have the largest proportion poor, but their poverty levels are sometimes exceeded by small town and rural residents when we examine specific characteristics of single mothers and their households. Some of these characteristics are discussed in this section.

In Table 4, characteristics of the single mother are examined in terms of proportions poor. Nonwhite mothers (both black and other races) are consistently more likely to be poor than are white mothers. The overall poverty rate among white mothers of 34.3 percent is lower than the overall poverty rate for all single mothers of 42 percent. This emphasizes the important relationship between race and poverty status. The patterns of poverty within residence areas differ somewhat from the overall pattern. That is, small town residents of any race are more likely to be poor than

central city residents; among black mothers, rural women are much more likely to be poor than their central city counterparts. As always, suburban women are least likely to be poor.

Proportions poor drop as educational attainment increases. The greatest decrease in proportion poor is found with attainment of a high school diploma -- proportion poor decreases by more than 25 percent in the overall group. Within residence areas, a very similar pattern holds true. Among mothers with the least education, central city mothers have much higher rates of poverty than the others, and rural women are somewhat lower. This may be a reflection of age differences among these groups, with the older rural women more able to obtain employment and income in spite of low education levels. It may also reflect racial differences and unequal access to employment and income. Interestingly, at the highest education levels, small town women actually have a lower proportion poor than suburban women. The small number in this group, however, may give misleading results.

In terms of marital status and poverty, two groups emerge. High poverty levels are found among separated, married,[1] and never married women. Lower than average poverty rates are found among widowed and divorced women. This difference seems to be related to nature of the mother's relationship with the father of her children, or with her former husband. Both widows and divorced women have formal, legal relationships to their husbands and, to some degree, to their husbands' income. Never married and separated women have

no such legal relationships. Within the four residence areas, suburban mothers have the lowest levels of poverty for all marital status groups. As noted before, divorced women are the largest marital status group among single mothers. About one-third of central city, small town, and rural mothers who are divorced are poor, while only 22 percent of suburban divorced women are poor.

Poverty rates decline with increasing age; only when single mothers reach age 50 is there a reversal of this trend. The greatest decrease in poverty levels occurs with single mothers age 30-39 -- they are much less likely to be poor than are mothers age 20-29. Some of the highest poverty rates found in this research occur among teenage single mothers -- 85 percent or more of these women are poor, varying with residence area. In this sample, however, this group is quite small.

The household composition variable provides evidence in support of Hypothesis 2: households with an extra adult are less likely to be poor than those with only the single mother. (Note that poverty status applies only to family members within the household.) In all four residence areas, highest poverty rates are observed in households with only minor children, and poverty rates are lower for households with an extra adult present -- whether that adult is a child of the head or not. The lowest rates of poverty are observed in households with an adult child present. Apparently, in some cases an extra adult is more likely to be an economic burden; more so when the adult is not a child of the head.

The presence of extra adults in the household also provides evidence for Hypothesis 2. Poverty rates are lower when another adult in addition to the single mother lives in the household. And poverty rates continue todecline when three or more adults are present. Hypothesis 2A can be examined with these data; in households with an extra adult, are urban poverty rates lower than rural ones? The answer is no, except in the case of suburban households. Central city households with two adults present are more likely to be poor than are rural or small town households. When three or more adults are present small town households are poorest, but central city households are more likely to be poor than are rural households.

Employment of the single mother provides verification for Hypothesis 3, as shown in Table 4. Without exception, employment is associated with lower poverty rates and, conversely, being outside the labor force is associated with the highest levels of poverty. While this is not surprising, it is interesting to note both the strength of this association and the variations across residence types. Part-time employment of the single mother head during 1979 brings the family poverty rate down to 48.7 percent, and when she is employed full time the overall poverty rate drops to 10.6 percent. These rates can be contrasted with the overall poverty rate of 42 percent, and with almost 78 percent poverty when the mother is not employed. Across the four residence groups the same relationships hold true. Suburban residents have the lowest poverty rates;

central city residents have the highest poverty rates when the head is not employed. Of special interest here is that small town and rural residents share the distinction of having highest poverty rates when the single mother is employed. The fact that almost 60 percent of small town mothers who work part time are poor is especially striking. There is a selection bias inherent in this relationship. Women who have the skills necessary to obtain employment are more likely to be employed, leaving the least employable women out of the labor force, and thus more likely to be poor.

The relationships between number of adults earning income in 1979 and poverty status also help confirm Hypothesis 3. Households with no adults earning income in 1979 have the highest poverty levels while households with one adult earner have poverty rates below 37 percent. Only 25.6 percent of suburban households with one adult earner are poor. Presence of two or more earners is related to even lower poverty rates -- less than 25 percent everywhere, and less than 20 percent in rural areas and suburbs.

The evidence in support of Hypothesis 3A is also presented in Table 4. Hypothesis 3A states that, among households with employed adults, urban poverty levels are lower than rural ones. As noted earlier, poverty rates for employed single mothers heads are consistently lower than those of mothers who are not employed, across all four residence groups. In terms of full time employed mothers (working 1750 or more hours), poverty rates in urban areas

are lower than rates in rural areas: 12.2 percent of full time workers in central cities are poor, and 6.3 percent in suburbs, while small town and rural mothers have rates of 13.0 percent and 13.5 percent, respectively. The picture is somewhat less clear for part time working mothers. Highest poverty rates are experienced by small town mothers (59.8 percent), but this is followed by central city (48.2 percent) and then rural mothers (47.3 percent). Suburban mothers, as always, have the lowest poverty rate, at 45.3 percent. Thus, the poverty rates for employed mothers give partial support to Hypothesis 3A.

Poverty rates for households with one adult earner (including the head) give some further support to Hypothesis 3A. When there is one adult earner in the household, small town and rural households have the highest poverty rates (36.2 and 34.6 percent respectively), followed by central city (31.9 percent) and suburban households (25.6 percent). The pattern changes, however, in households with two or more adults earning income. Highest poverty rates are found in small town households, followed by central cities. Thus, the evidence for Hypothesis 3A is mixed. It appears that central cities are more similar to rural areas than they are to suburban areas when earned income and poverty are examined. This question will be raised again with the multivariate analysis, to see whether controlling for sociodemographic characteristics will yield a different outcome.

Multivariate Analysis

This section includes the specification and estimation of all multivariate models, in order to test the five hypotheses. In all models, four variables are included to control for the effects of socioeconomic variables presented in the previous section: race, education, marital status and age of mother.

The first hypothesis -- that poverty rates are lower in urban than in rural areas -- is tested with a multivariate model using multiple classification analysis (MCA), in order that proportion poor may be compared between models for the four residence areas with and without controls. The dependent variable is poverty status, coded as a dichotomous variable: poor and nonpoor. The results are presented in Table 5.

The column labeled "Unadjusted Percent" in Table 5 presents the proportion in poverty for each independent variable. These results are the same as proportions poor shown in Table 4. The "Adjusted Percent" column presents the proportion in poverty for each variable, controlling for all the other independent variables in the model.

The proportion poor in central cities, controlling for race, education, marital status and age, drops from 48 to 43 percent[2] when other variables in the model are controlled. The proportion poor in suburbs is 38 percent in the multivariate model, considerably higher than the 33 percent poor in the simple model.

Table 5

Multiple Classification Analysis of Proportion Poor for Selected Demographic Characteristics of Single Mother Households

Characteristics	Number	Unadjusted Percent	Eta	Adjusted Percent	Beta
Total	5,796	42			
Residence					
Central city	2,523	48		43	
Suburb	1,672	33		38	
Small town	721	45		45	
Rural	879	41		43	
			.13		.05
Race					
White	3,581	34		39	
Black	1,863	53		46	
Other	351	60		50	
			.20		.08
Education					
0-8 years	703	63		62	
9-11 years	1,307	61		57	
12 years	2,439	36		36	
13+ years	1,347	23		27	
			.31		.27
Marital Status					
Widowed	692	32		34	
Divorced	2,689	29		34	
Separated	1,214	57		53	
Married	215	59		59	
Never married	986	63		52	
			.30		.19
Age					
16-19	68	89		70	
20-29	1,645	56		51	
30-39	2,325	38		41	
40-49	1,231	31		33	
50 +	526	35		33	
			.22		.16
R^2			.193		

Proportions poor in small town and rural areas are 45 and 43 percent respectively in the multivariate model. Thus, the proportions poor in rural areas -- including small towns -- are equal to or higher than the proportions poor in cities and suburbs, when controlling for race, education, marital status and mother's age. These findings provide confirmation of Hypothesis 1.

Hypothesis 2 states that households with more than one adult are less likely to be poor than those with only one adult, i.e., the single mother. This is tested with multiple classification analysis; results are presented in Table 6. Only adjusted percents are presented in this table; as noted earlier, the unadjusted percents are identical to those included in Table 4. This table provides clear and unequivocal evidence in support of Hypothesis 2. For all four residence areas as well as for the total group, the presence of extra adults is associated with lower poverty levels, controlling for the effects of race, education, marital status and age. Overall, the adjusted percent poor for households with two or more adults is 35 percent while 45 percent of households with one adult are poor. The pattern is similar in the four residence areas; the difference in proportion poor between households with one and two or more adults is eight or more percentage points. In comparison with the grand mean for each residence area, households with one adult are always more likely to be poor, and households with an extra adult are always less likely to be poor.

Hypothesis 2A posits that, in households with an extra adult

Table 6

Multiple Classification Analysis of Effect of Additional Adults in Single Mother Households on Proportion Poor in Urban and Rural Areas

Characteristics	Number	Adjusted Percent Poor				
		Total	Central City	Suburb	Small Town	Rural
Adults Present						
Head only	3,956	45	51	36	47	45
Two or more	1,839	35	41	27	39	33
Beta		.09	.10	.09	.07	.11
Race						
White	3,581	39	44	31	43	38
Black	1,863	47	50	39	50	55
Other	351	50	56	38	50	51
Beta		.09	.08	.07	.06	.14
Education						
0-8 years	703	64	69	60	61	57
9-11 years	1,307	58	65	46	67	50
12 years	2,439	36	41	29	39	36
13 + years	1,347	26	29	24	20	28
Beta		.28	.30	.23	.35	.20
Marital Status						
Widowed	692	35	37	32	39	31
Divorced	2,689	34	38	26	39	37
Separated	1,214	53	57	45	59	55
Married	215	59	63	56	50	67
Never married	986	51	57	41	56	48
Beta		.19	.20	.19	.18	.20
Age						
16-19	68	69	67	69	80	82
20-29	1,645	51	53	45	57	50
30-39	2,325	40	47	32	40	39
40-49	1,231	35	42	25	34	35
50+	526	35	40	22	50	40
Beta		.14	.10	.18	.19	.13
Grand Mean		42%	48%	33%	45%	41%
R^2		.199	.205	.181	.249	.156

present in addition to the single mother, urban poverty rates will be lower than rural poverty rates. Multiple classification analysis results shown in Table 6 provide mixed evidence. Among households with more than one adult, suburban households have the lowest poverty rate, 27 percent. The next lowest rate, however, is found in rural households with 33 percent poor, followed by small town with 39 percent poor, and the highest rate is among central city households with 41 percent poor. Thus, central city households do not conform to the hypothesis.

Hypothesis 3 states that households with employed members are less likely to be poor than those with no employed members. This is tested with multiple classification analysis using number of adults earning income during 1979 as the independent variable of interest. The distribution of this variable is shown in Table 2; MCA results are in Table 7A. The proportion poor, controlling for effects of other variables, is indeed much smaller in households with adult earners. This is true for all residence areas as well as for the total group. The decrease in proportion poor between households with no earners and those with one earner is dramatic: 78 percent of all households with no adult earner are poor, while 33 percent of households with one adult earner are poor. The smallest decline in proportion poor occurs in small town households, but even there the difference in proportions poor is 36 percent. Thus Hypothesis 3 is confirmed without reservation.

It is possible, with these data, to examine the effects of

Table 7A

Multiple Classification Analysis of Effect of Adults Earning Income in Single Mother Households on Proportion Poor in Urban and Rural Areas

Characteristics	Number	Adjusted Percent Poor				
		Total	Central City	Suburb	Small Town	Rural
Total Adult Earners						
None	1,401	78	83	72	76	76
One	3,292	33	35	27	40	36
Two or more	1,103	23	26	17	27	21
Beta		.42	.46	.40	.34	.38
Race						
White	3,581	40	45	32	43	38
Black	1,863	45	49	37	51	53
Other	351	48	42	38	49	51
Beta		.06	.05	.05	.07	.12
Education						
0-8 years	703	55	57	53	55	51
9-11 years	1,307	53	59	42	62	47
12 years	2,439	38	44	30	42	38
13+ years	1,347	31	37	27	24	32
Beta		.18	.18	.17	.27	.14
Marital Status						
Widowed	692	33	37	26	39	28
Divorced	2,689	38	43	29	41	40
Separated	1,214	50	54	42	54	54
Married	215	55	60	52	46	61
Never married	986	47	53	38	55	46
Beta		.13	.13	.14	.13	.18
Age						
16-19	68	67	64	74	80	71
20-29	1,645	49	51	44	55	49
30-39	2,325	41	48	32	40	39
40-49	1,231	36	44	26	37	36
50+	526	36	42	23	48	40
Beta		.11	.07	.17	.16	.11
Grand Mean		42%	48%	33%	45%	41%
R^2		.344	.378	.324	.347	.282

specific adults' employment on poverty status. As shown in Table 4, the employment of the single mother was strongly related to decreasing poverty status. In Table 7B the adults with earned income are separated into two groups: household heads and all other adults. Employment of the head, controlling for other adult earners and sociodemographic characteristics, is strongly related to reduced poverty levels. Overall, 73 percent of all households are poor when the head is not employed, 49 percent are poor when the head is employed part time, and only 14 percent are poor when the head is employed full time. Results are similar in all four areas: proportion poor declines sharply with employment of the head, and even more so when the head is employed full time. Indeed, when the head was employed full time (1750 or more hours), poverty rates dropped below 20 percent -- a very unusual occurrence in this population. The weakest effect of head employment is seen in small town households; 59 percent of these households remain poor when the head is employed part time. This is the highest poverty level among all households with part time employed heads. Among households with head employed full time in 1979, the highest proportion poor is again found in small towns (19 percent). This is followed by central city households with 17 percent poor when head is a full time employee, rural households at 14 percent poor, and suburban households with only 9 percent poor. The Beta statistics indicate that employment of the head is by far the most important variable in this model. Although MCA does not indicate proportion of variance

Table 7B

Multiple Classification Analysis of Effect of Labor Force Variables on Poverty in Single Mother Households in Urban and Rural Areas

Characteristics	Number	Adjusted Percent Poor				
		Total	Central City	Suburb	Small Town	Rural
Head Employment						
None	1,752	73	78	66	70	73
1-1749 hours	1,688	49	49	44	59	48
1750+ hours	2,356	14	17	9	19	14
Beta		.50	.52	.50	.46	.50
Other Adult Earners						
No other adults	3,952	45	51	36	47	45
No other earners	467	49	53	43	63	46
Other adult earners	1,377	32	37	23	35	30
Beta		.12	.12	.12	.14	.13
Race						
White	3,581	40	45	31	43	38
Black	1,863	46	49	39	50	53
Other	351	47	53	34	47	49
Beta		.06	.05	.07	.05	.12
Education						
0-8 years	703	52	53	50	54	48
9-11 years	1,307	51	57	39	61	45
12 years	2,439	40	46	31	42	40
13+ years	1,347	32	39	27	26	33
Beta		.15	.14	.14	.24	.10
Marital Status						
Widowed	692	28	34	19	36	23
Divorced	2,689	40	45	32	42	40
Separated	1,214	49	52	40	54	29
Married	215	52	58	46	47	58
Never married	986	47	53	37	54	37
Beta		.13	.12	.13	.13	.21

continued

Table 7B, continued

Age						
16-19	68	63	63	63	74	64
20-29	1,645	48	51	41	54	48
30-39	2,325	42	49	33	43	40
40-49	1,231	37	43	28	38	38
50+	526	33	40	21	39	36
Beta		.11	.08	.14	.13	.09
Grand Mean		42%	48%	33%	45%	41%
R^2		.418	.432	.411	.447	.376

explained by each independent variable, it is clear that the mother's employment plays a very large role in determining poverty status.

Similar results occur with analysis of employment among other adults in the household. As noted earlier, adults with earned income represent employed adults. When other adults are present, but not earning income, the overall poverty rate is 49 percent. When another adult is earning, the proportion poor drops to 32 percent. Within residence areas the central city and small town households are more likely to remain poor when another adult is earning income. The Beta statistic indicates that this variable is relatively less important than the head's employment. It is important to note, however, that the pattern of increasing employment related to decreasing poverty levels is maintained when adults in the households are separated into two groups.

Hypothesis 3A states that, among households with one or more employed adult, poverty rates in urban areas are lower than those in rural areas. This is operationalized with a model including the four control variables, plus the number of adult earners in the household. Multiple classification analysis results are presented in Table 7A.

Small town and rural households with one earner have higher proportions poor than central city or suburban households, thus partially confirming the hypothesis. When two or more adults earning income are present, small town and central city households

have the highest proportions poor. Since these results do not completely support the hypothesis, we turn to Table 7B for additional information. The results for employment of head and other adult earners do not provide confirmation of Hypothesis 3A. In general, in households with employed heads, poverty rates are highest in small towns, followed by central cities. The reverse is true for households with other adults employed: proportion poor is highest for central city cases, followed by small towns and then rural areas. Only in the suburban households, with consistently the lowest poverty levels, do we find evidence that urban poverty is lower overall than rural poverty.

A multiple regression analysis of these variables was conducted to estimate regression coefficients, and thus learn more about their relationship to poverty status. The dependent variable is the income-needs ratio, ranging in value from 0 to 1500 with a mean of 153.5. This variable is the Census poverty status, recalculated by dividing 1979 family income by the poverty threshold appropriate to that family size, then dividing by 100. The poorer a family, the smaller the income-needs ratio, and vice versa. Families with an income-needs ratio of 100 or more are not poor. The first regression model estimated includes the sociodemographic control variables along with residence areas. Race is coded dichotomously: white and nonwhite. Marital status is coded as five dummy variables, omitting the category of "never married" to avoid problems with multicollinearity. Age and education of mother are

coded in single year increments. Area of residence is coded as four dummy variables, with suburbs omitted, again to avoid multicollinearity.

Results are presented as Model 1 in Table 8. The negative coefficient for race indicates that the average income-needs ratio is lower for nonwhites than for whites, controlling for the effects of education, marital status, age and residence. A one-year increase in educational attainment is associated with a 14-point increase in the income-needs ratio, controlling for the effects of the other variables in the model. The dummy variable coefficients for marital status indicate that widowed and divorced mothers are better off than the omitted category of never married mothers, while separated and married (spouse absent) mothers are worse off. For example, the mean income-needs ratio for widowed mothers is almost 30 points greater than the mean for never married mothers. The coefficient for age indicates that a one-year increase in age is associated with a modest 3-point increase in the dependent variable, controlling for race, education, marital status and residence effects. The coefficients for the dummy variables for residence compare the difference in mean income-needs ratio to the omitted category of suburban residents. Small town and rural residents are least well off, with a mean ratio more than 30 points lower than the suburban mean. Model 1 accounts for 21.6 percent of the variance in the income-needs ratio.

Model 2 includes the number of adults present in addition to the

Table 8

Multiple Regression Analysis of the Effect of Adults and Employed Persons on Income-Needs Ratio for Single Mother Households in Urban and Rural Areas, 1979 (n=5,796)

Independent Variables	Model 1		Model 2		Model 3	
	Regression Coefficient	Standardized Coefficient	Regression Coefficient	Standardized Coefficient	Regression Coefficient	Standardized Coefficient
Race	-24.012***	-.089	-27.379***	-.101	-23.965***	-.089
Education	14.287***	.305	14.552***	.311	10.109***	.216
Widowed	29.595***	.073	26.568***	.066	32.501***	.080
Divorced	27.105***	.103	26.812***	.102	4.826	.018
Separated	-16.308***	-.051	-16.097***	-.050	-16.437***	-.051
Married	-28.240***	-.041	-28.953***	-.042	-25.664***	-.037
Age	3.035***	.218	2.676***	.193	2.454***	.177
Central City	-14.670***	-.056	-14.886***	-.056	-7.854*	-.030
Small Town	-32.273***	-.081	-32.036***	-.081	-31.513***	-.079
Rural	-30.774***	-.084	-30.610***	-.084	-29.549***	-.081
Adults Present			14.106***	.087		
Head Employment					59.549***	.379
Other Adult Earners					14.754***	.109
Constant	-109.821***		-116.223***		-101.144***	
R^2	.216		.223		.351	

* $p \leq .05$
** $p \leq .01$
*** $p \leq .001$

variables in Model 1. The addition of this variable, although significant, does not yield a large increase in percent of explained variance. The General F Test indicates that the addition of adults present to the model is significant at the .001 level (F = 50.0). There are only minor changes in the regression coefficients between Models 1 and 2. In both models, according to the standardized coefficients, variables responsible for the greatest variance in mean income-needs ratio are education and age.

Model 3 adds head employment and number of other adult earners to the variables included in Model 1. This results in explaining 35.1 percent of the variance in the dependent variable. The addition of these variables is again significant at the .001 level (F = 600.4). A change in head's employment status, either from not in labor force to part time employment, or from part time to full time employment, results in a 60-point increase in the income-needs ratio. This result occurs when the effects of race, education, marital status, age, and other earners are controlled, making an even stronger statement about the importance of employment in single mother households. The addition of one adult earner in a household is associated with more than a 14-point increase in the income-needs ratio. The standardized coefficients for Model 3 indicate that head's employment is very important, followed by education and age, in determining change in the dependent variable. The coefficient for divorced marital status undergoes a striking change in Model 3, indicating possible interaction effects with head's employment.

In all three regression models, the coefficients for small town and rural areas indicate a poorer income-needs ratio than in central cities or suburbs. This again supports Hypothesis 1, and indicates the urban-rural residence concept is useful in studying the distribution of poverty.

CONCLUSIONS

Summary

This research brings together data concerning single mothers and their households to study the effects of household composition and labor force participation on family poverty status. In 1979, single mother families had a very high level of poverty -- 42.0 percent overall-- as well as a moderately high level of participation in the labor force -- 75.8 percent of households had an adult member in the labor force.

In a descriptive analysis, characteristics of single mothers are examined in terms of their area of residence. These data indicate that single mothers are not a homogeneous group -- there are some important differences between single mother households in urban and rural areas. The proportion of minority single mothers is much higher in central cities than elsewhere; rural mothers are older on average than mothers elsewhere. Suburban single mothers are better educated than any of the other residence groups. In all four residence areas, the most common marital status is divorced; the next most common status varies by residence area, with never married second in central cities, separated second in suburbs and small towns, and widowed second in rural areas.

Over two-thirds of single mother households consist of only a

mother and her minor children. Data presented here help in our understanding of the role played by extra adults in the single mother household. In about one-fifth of all single mother households there are two or more adults earning income. The single mother herself is employed in over two-thirds of all cases. Labor force participation levels are greatest in suburban households and lowest in central city households, with small towns and rural households in between.

Poverty status also varies among families living in urban and rural areas. The highest percent poor occurs among central city families, followed by small town and rural families. Suburban single mother families have the lowest proportion poor, although still much higher than the national average percent poor for all families.

As has been found in prior research, poverty status varies by demographic characteristics of the single mother and her family. White mothers are much less likely to be poor than are nonwhite mothers. Higher education levels as well as older age groups are associated with lower levels of poverty. Divorced and widowed mothers are less likely to be poor than others. And mothers who live with another adult are less likely to be poor than mothers living with only minor children. The employment of single mothers is associated with dramatically lower proportions poor, even more so when mothers are employed full time. Earned income from employment of other adults in the household is also associated with lower

poverty levels.

Multivariate analysis confirms the differences between households in rural and urban areas with the finding that rural single mother families (small town and rural) are as poor or poorer than those in urban areas (central city and suburb) when controlling for mother's race, education, marital status and age. This analysis also confirms that the differences between mothers in urban and rural areas in terms of their race, education, marital status and age remain when controlling for effects of other variables.

Extra adults living in the single mother household and earnings from these extra adults are both associated with decreased poverty levels. These relationships remain strong when controlling for race, education, marital status and age of the mother.

Patterns of poverty across the rural-urban continuum do not remain clear in multivariate analysis of labor force participation. For example, in households with one adult earner, highest poverty levels are found in small towns, followed by rural areas, but when two or more adults are earning income, highest poverty levels in small towns are followed by central cities as second highest. When employment of only the single mother is examined, poverty levels are more consistent: highest in small towns, followed by central cities and then rural areas and suburbs. Among households with an extra adult earning income, poverty levels are highest in central cities, followed by small towns. This result suggests that the presence of extra adult earners operates differently than the employment of the

single mother in reduction of family poverty. In central cities, the extra earner may be more likely to be a nonrelative whose earnings do not impact the family poverty status, or to be earning a relatively small amount. In small towns the employed mother clearly has a more difficult time in earning an above-poverty wage. In rural areas, her returns on employment are more clearly beneficial to her family.

Discussion

A finding of strong associations between employment and poverty status is not new, nor is it surprising. The more significant finding is that many single mothers remain poor, even when employed part time, or even when other members of their households are employed. This serves to underline the inequities that many women experience in the labor market. As long as many women are paid less than men for comparable work, as long as certain occupations are more likely to be held by women and others more likely to be held by men, women will continue to be less able than men to support a family above the poverty level. The fact that so many single mothers choose employment in the face of these odds demonstrates a strong will to support a family under adverse circumstances.

The absent father clearly has an obligation also to contribute to the support of his children. Until recently, this has been a small proportion of the income in most single mother families. With several states experimenting with methods of collecting and

distributing fathers' contributions, it is expected that there will be more regular child support available to single mothers in the future.

The need for a comprehensive federal family policy has been strongly stated by Sidel (1986) and several others. It seems clear that the most workable policies would provide equal access to programs for all families. Instead of using the poverty threshold as an arbitrary cutoff point for eligibility, program benefits would decline as family income increased. This creates a continuing incentive to improve family income through training and employment.

Family policies should recognize the differences between two-parent and single-parent households; when the tasks of child-rearing and homemaking are all the responsibility of one person, they can be overwhelming. Trying to maintain employment along with arrangements for childcare, taking care of health needs of well and ill children, and managing a household on a small budget can be virtually impossible. Many single mothers have sporadic employment records due to these many competing demands.

A national child care policy making low-cost, good quality child care available to families with lower incomes would extend the single mother's ability to earn a living. Currently, many single mothers cannot afford to work because the high cost of child care, along with transportation and other costs of employment, uses up a substantial part of income earned. An effective child care policy would provide more incentive for employment.

The federal Family Support Act of 1988 takes several steps toward implementing some of these policy provisions. It requires states to automatically withhold child support payments from noncustodial parents, along with a requirement for a computerized tracking system. Several major provisions of the Act will help reform the welfare system, particularly eliminating work disincentives by providing child care and Medicaid benefits for one year to families leaving welfare for employment (U.S. House of Representatives, 1989). The Act also mandates increasing AFDC-recipient participation in education and job training programs, emphasizing participation of families most likely to be long-term welfare recipients. The major provisions of the Act will be phased in during 1990.

Data presented here provide evidence that, when it comes to employment, single mother families in small towns are different from families in other areas, i.e., families with employed members are more likely to be poor in small towns than in other areas. A prior analysis of average earnings among single mothers employed full time showed that small town mothers' earnings were low because of lower pay rates in small towns than elsewhere, and not because of differing occupational structures (Cautley and Slesinger, 1988). Traditionally, national employment and wage policies have not addressed urban-rural or geographic differences. Most efforts at addressing such wage and employment inequities have focused on rural economic development programs, along with education and training

programs. There is a need for further research on rural labor markets, including research on the impact of the "rural renaissance".

Further research is also needed into the relationship of household composition to employment and poverty status. How does household income of single mothers living with adult children differ from income of mothers living with other adult relatives, or from mothers with unmarried partners? What are the patterns of income distribution when other adults are present? How do employment and income patterns vary when the single mother is not the head of household? Additional research on employment of single mothers is also needed. How do part time and full time employment patterns occur, and how do they differ from those of married mothers? Why are some mothers with marginal job skills in the labor market while others are not? How do employment patterns vary among occupational grouping? How do employment patterns differ between low-wage and high-wage areas? In addition, comparisons of single mothers to married couples with children in urban and rural areas would provide information on whether the urban-rural differences found here are universal or specific to single mother households.

This research has helped define important differences between single mother households in urban and rural areas. It is hoped that, as our understanding of these households increases, our ability to design effective family policies will also increase.

FOOTNOTES

1. The "married spouse absent" category is a small, yet complex group of women. They include wives separated from their husbands because of military service or employment, along with wives whose husbands are institutionalized in prisons, long-term care hospitals, and the like. The category can also include wives deserted by their husbands who are not willing to label themselves as separated. In some research, this marital status category is omitted from analysis because of the complexity involved.

2. Multiple classification results are presented as whole percents without decimals, unlike other results in this paper.

APPENDIX A

Sampling, Weighting, and Data Extract

The first step in creating this data set was to stratify the entire 1980 Public Use Microdata Sample (PUMS) C Sample into urban and rural components, while also eliminating vacant housing units and residents of group quarters. (Urban is used here to mean Urbanized Area, as defined by the Bureau of the Census; rural is Outside Urbanized Area.) This resulted in a data set of approximately 805,000 useable cases.

The next step was to draw a random sample of all female headed households. Because an adequate sample of rural households is essential to this analysis, 20 percent of all rural female headed households were randomly sampled, while 10 percent of all such urban households were sampled. The results were 7,594 rural and 18,725 urban female headed households, a total of 26,319 cases.

Two weights were then calculated, in order to return the samples to their actual population proportions. A "mean weight" was calculated first and then used to calculate two "adjusted weights," which are applied to the random sample. The "mean weight" is calculated to increase the entire sample to 20 percent, without regard for urban/rural status. It is calculated as

(2 * 18,725) + 7,594 = 45,044

45,044 / (18,725 + 7,594) = 1.71146

The mean weight is 1.71146. The adjusted weights are calculated from the relative proportions of the urban and rural samples:

urban weight = 2/1.71146 = 1.1686

rural weight = 1/1.71146 = 0.5843

The resulting weighted sample sizes are:

urban sample: 18,725 * 1.1686 = 21,882.035 cases

rural sample: 7,594 * 0.5843 = 4,437.174 cases

total sample = 26,319.209 cases

Note that the weighted sample has the same number of cases as the unweighted sample. In addition, the proportions of urban and rural cases in the weighted sample are identical to their proportions in the total population.

In the next step, all family households with female householder, no husband present, were extracted from the data set. The unweighted number of cases was 9,651. This extract was merged with a special PUMS C Sample data file, used to obtain several additional variables pertaining to ages of children.

The final step was to extract households with one or more own children under age 18. The final sample size is 5,712 unweighted cases or 5,796 weighted cases. Tests have been performed that have empirically determined that the weighting procedure developed for the initial PUMS sample is equally valid for this and other extracts from that sample.

APPENDIX B

Nonrelatives and Poverty Status

There are 575 households (9.9 percent) in this sample which include one or more persons not related to the single mother head of household. The vast majority of these unrelated people are adults, defined as age 18 or older -- 554 households include one or more adult nonrelatives. Poverty status is computed separately for these nonrelatives, so they do not necessarily share the same economic position as the single mother and her children. When poverty status is coded dichotomously -- poor and nonpoor -- 43 percent (n=239) of the households with an unrelated adult have a different poverty status for the unrelated person than for the single mother and her family. Of these 239 households, almost two-thirds (n=152) include a nonpoor unrelated adult living with a poor single mother. In the remaining 86 households, the single mother is nonpoor while the unrelated adult is poor. There appear to be no differences between rural and urban areas in these trends.

To summarize, 2.6 percent of households in this sample include a nonrelated adult who is not poor and living with a poor family. Another 1.5 percent of households include a poor nonrelated adult living with a nonpoor family, and 5.4 percent of households include a nonrelated adult whose dichotomous poverty status is the same as

that of the single mother and her family. Overall, 9.6 percent of households in this survey include a nonrelated adult. About 20 households (0.4 percent of sample) include a nonrelated child.

REFERENCES

Andrews, Frank M., J.N. Morgan, J.A. Sonquist, and L. Klem.
1973 Multiple Classification Analysis, 2nd edition. Institute for Social Research, University of Michigan, Ann Arbor.

Bane, Mary Jo.
1986 "Household Composition and Poverty." Chapter 9 in Fighting Poverty: What Works and What Doesn't. Edited by S.H. Danziger and D.H. Weinberg, Harvard University Press, Cambridge, MA.

Bane, Mary Jo and D. Ellwood.
1986 "Slipping into and Out of Poverty: The Dynamics of Spells." Journal of Human Resources 21(1):1-23.

1989 "One Fifth of the Nation's Children: Why Are They Poor?" Science 245:1047-1053.

Bealer, Robert C., Fern K. Willits and William P. Kuvlesky.
1965 "The Meaning of 'Rurality' in American Society: Some Implications of Alternative Definitions." Rural Sociology 30(3):255-266.

Beck, E.M., Patrick M. Horan and Charles M. Tolbert II.
1978 "Stratification in a Dual Economy: A Sectoral Model of Earnings Determination." American Sociological Review 43:704-720.

Bergmann, Barabara R.
1986 The Economic Emergence of Women. Basic Books, New York.

Bianchi, Suzanne M. and Daphne Spain.
1986 American Women in Transition. [the population of the U.S. in the 1980s] A Census Monograph Series. NY: Russell Sage Foundation.

Blau, Francine D. and Marianne A. Ferber.
1985 "Women in the Labor Market: The Last Twenty Years." Chapter 1 in Women and Work: An Annual Review, Vol. 1, edited by Laurie Larwood, A.H. Stromberg and Barbara A. Gutek, Sage Publications, Beverley Hills, CA.

Bokemeier, Janet L., Carolyn Sachs, and Verna Keith.
1983 "Labor force participation of metropolitan, nonmetropolitan, and farm women: a comparative study." Rural Sociology 48(4):515-539.

Bokemeier, Janet L. and Ann R. Tickamyer.
1985 "Labor Force Experiences of Nonmetropolitan Women." Rural Sociology 50(1):51-73.

Brown, David L. and Jeanne M. O'Leary.
1979 "Labor Force Activity of Women in Metropolitan and Nonmetropolitan America." Rural Development Research Report No. 15, Economic Development Division, U.S.D.A. (September).

Bumpass, Larry.
1984 "Children and Marital Disruption: A Replication and Update." Demography 21(1):71-82.

Castro, Teresa and Larry Bumpass.
1987 "Recent Trends and Differentials in Marital Disruption." Working Paper 87-20, Center for Demography and Ecology, University of Wisconsin-Madison.

Cautley, Eleanor and Doris P. Slesinger.
1988 "Labor Force Participation and Poverty Status Among Rural and Urban Women Who Head Families." Policy Studies Review 7(4):795-809.

Deavers, Kenneth L., Robert A. Hoppe and Peggy J. Ross.
1986 "Public Policy and Rural Poverty: A View from the 1980s." Policy Studies Journal 15(2):291-309.

Duncan, Greg J. and Willard Rodgers.
1987 "Single-Parent Families: Are Their Economic Problems Transitory and Persistent?" Family Planning Perspectives 19(4):171-178.

Garfinkel, Irwin and Sara McLanahan.
1985 "The Feminization of Poverty: Nature, Causes, and a Partial Cure." Discussion Paper 776-85, Institute for Research on Poverty, University of Wisconsin, Madison, WI (April).

1986 Single Mothers and Their Children: A New American Dilemma. The Urban Institute Press, Washington, D.C.

Ghelfi, Linda M.
1986 "Poverty Among Black Families in the Nonmetropolian South." Rural Development Research Report Number 62, Economic Research Service, U.S. Department of Agriculture, Washington, D.C.

Goldberg, Gertrude S. and Eleanor Kremen.
1987 "The Feminization of Poverty: Only in America?" Social Policy 17(4):3-14.

Haney, Wava G.
1982 "Women." Chapter 12 (p. 124-135) in Dillman and Hobbs (eds.), Rural Society in the U.S.: Issues for the 1980s. Westview Press, Boulder, CO.

Hanson, Sandra L.
1982 "The Effects of Rural Residence on the Socio-Economic Attainment Process of Married Females." Rural Sociology 47(1):91-113.

Hoppe, Robert A.
1988 "Defining and Measuring Nonmetropolitan Poverty: Results from the Survey of Income and Program Participation." Paper presented at annual meeting of Rural Sociological Society, August, Athens, GA.

Jacobs, Jerry A.
1987 "Long-Term Trends in Occupational Segregation by Sex." Paper presented at annual meeting of American Sociological Association, August, Chicago, IL.

Kniesner, Thomas J., Marjorie B. McElroy and Steven P. Wilcox.
1986 "Family Structure, Race, and the Feminization of Poverty." Discussion Paper No. 810-86, Institute for Research on Poverty, University of Wisconin, Madison, WI (September).

McGranahan, David A., John C. Hession, Fred K. Hines and Max F. Jordan.
1986 "Social and Economic Characteristics of the Population in Metro and Non-metro Counties, 1970-80. Rural Development Research Report Number 58, Economic Research Service, U.S. Department of Agriculture. Washington, D.C.

McLanahan, Sara, Irwin Garfinkel and Dorothy Watson.
1986 "Family Structure, Poverty and the Underclass." Working Paper 86-13, Center for Demography and Ecology, University of Wisconsin, Madison, WI.

McLaughlin, Diane K. and Carolyn Sachs.
1988 "Poverty in Female-Headed Households: Residential Differences." Rural Sociology 53(3):287-306.

Neter, John, William Wasserman and Michael H. Kutner.
1983 Applied Linear Regression Models. Richard D. Irwin, Homewood, Illinois.

O'Connell, Martin and David E. Bloom.
1987 "Cutting the Apron Strings: Women in the Labor Force in the 1980s." Discussion Paper 87-1, Center for Population Studies, Harvard University, Cambridge, MA (February).

O'Hare, William P.
1988 "The Rise of Poverty in Rural America." Population Trends and Public Policy Number 15, Population Reference Bureau, Washington, D.C.

Oppenheimer, Valerie K.
1970 "The Female Labor Force in the United States." Population Monograph Series, No. 5, University of California, Berkeley, CA.

Presser, Harriet B.
1986 "Shift Work Among American Women and Child Care." Journal of Marriage and the Family 48(August):551-563.

Presser, Harriet B. and Wendy Baldwin.
1980 "Child Care as a Constraint on Employment: Prevelence, Correlates, and Bearing on the Work and Fertility Nexus." American Journal of Sociology 85(5):1202-1213.

Ross, Peggy J. and Elizabeth S. Morrissey.
1986 "Persistent Poverty Among the Nonmetro Poor." Paper given at South Rural Sociological Association, Orlando, FL.

Scott, Hilda.
1984 Working your Way to the Bottom: The Feminization of Poverty. Pandora Press, London.

Sidel, Ruth.
1986 Women and Children Last: The Plight of Poor Women in Affluent America. Viking, New York.

Slesinger, Doris P. and Eleanor Cautley.
1988 "Determinants of Poverty Among Rural and Urban Women Who Live Alone." Rural Sociology 53(3):307-320.

Smith-Lovin, Lynn and Ann R. Tickamyer.
1981 "Fertility and Patterns of Labor Force Participation Among Married Women." Social Biology 28(1-2):81-95.

Sweet, James A.
1973 Women in the Labor Force. Seminar Press, New York.

Taeuber, Cynthia M. and Victor Valdisera.
1986 "Women in the American Economy." Current Population Reports Special Studies Series P-23, No. 146, U.S. Bureau of the Census. U.S. Government Printing Office, Washington, D.C.

Tienda, Marta and Jennifer Glass.
1985 "Household Structure and Labor Force Participation of Black, Hispanic, and White Mothers." Demography 22(3):381-394.

U.S. Bureau of the Census.
1971 "Household and Family Characteristics: March 1970." Current Population Reports, Series P-20, No. 218. Washington, DC: US Government Printing Office.

1981 "Household and Family Characteristics: March 1980." Current Population Reports, Series P-20, No. 366. Washington, DC: US Government Printing Office.

1982 "User's Guide, Part A." Text, 1980 Census of Population and Housing, PHC80-R1-A. Washington, D.C., U.S. Government Printing Office.

1983 1980 Census of Population, General Social and Economic Characteristics, United States Summary (Vol. 1, Chapter C), PC80-1-C1. Washington, D.C.: U.S. Government Printing Office.

1984 1980 Census of Population, Detailed Population Characteristics, United States Summary (Vol. 1, Chapter D, Section A), PC80-1-D1-A. Washington, D.C.: U.S. Government Printing Office.

U.S. House of Representatives, Committee on Ways and Means.
1989 "General Explanation of the Family Support Act of 1988." Prepared for the use of the Committee on Ways and Means by its Staff, Feb. 10, 1989. Washington, D.C.: U.S. Government Printing Office.

Waite, Linda J.
1981 "U.S. Women at Work." Population Bulletin 36(2), Population Reference Bureau, Washington, D.C.

Weinberg, Daniel H.
1987 "Rural Pockets of Poverty." Rural Sociology 52(3):398-408.

Willits, Fern K., Robert C. Bealer and Donald M. Crider.
1982 "Persistence of Rural/Urban Differences." Chapter 7 (p. 69-76) in Dillman and Hobbs (eds.), Rural Society in the U.S.: Issues for the 1980s. Westview Press, Boulder, CO.

Wilson, William Julius, Robert Aponte, Joleen Kirschenman and Loic J.D. Wacquant.
1987 "The Changing Structure of Urban Poverty." Paper presented at annual meeting of American Sociological Association, August, Chicago, IL.

Wojtkiewicz, Roger A., Sara S. McLanahan and Irwin Garfinkel.
1987 "The Growth of Families Headed by Women: 1950 to 1980." Discussion Paper 822-87, Institute for Research on Poverty, University of Wisconsin, Madison, WI.